

Case 2859***Johnstonia* Quatrefages, 1866 (Annelida, Polychaeta): proposed conservation**

Andrew S.Y. Mackie

Department of Zoology, National Museum of Wales, Cathays Park, Cardiff CF1 3NP, Wales, U.K.

Judith Gobin

Institute of Marine Affairs, Carenage, Trinidad and Tobago

Abstract. The purpose of this application is to conserve the name *Johnstonia* Quatrefages, 1866 for a genus of marine polychaetes (family MALDANIDAE). Quatrefages had earlier (1849) applied this name in a different taxonomic sense to an indeterminate species in the NEREIDAE. The suppression of the unused senior homonym is proposed, as is the formal rejection of the junior homonyms *Johnstonia* Fuhrmann, 1920 (Cestoda) and *Johnstonia* Basir, 1956 (Nematoda).

1. The generic name *Johnstonia* was first published by Quatrefages (1849, p. 304 footnote) for a polychaete annelid of the family NEREIDAE, evidently in honour of George Johnston (1797–1855), an authority on invertebrates. Further reference to this genus was made in a summary (Quatrefages, 1850a, p. 42 footnote) of the publication in which the type species *J. prolifera* was described (Quatrefages, 1850b, p. 350, pl. 8, figs. 1–2). Marschall (1873, p. 434) listed *Johnstonia* Quatrefages, 1849 as a synonym of *Heteronereis* Örsted, 1842; following recognition of the true epitokous nature of the latter genus, Ehlers (1868, p. 450) had earlier synonymised both *Johnstonia* (in the sense of Quatrefages, 1849) and *Heteronereis* with *Nereis*. McIntosh (1910, p. 277) considered *Johnstonia prolifera* an epitoke of *Nereis pelagica* Linnaeus, 1758 or ‘other species of *Nereis*’. No type material is present in the Muséum National d’Histoire Naturelle in Paris, or known from elsewhere, and *J. prolifera* must be regarded as a nomen dubium. Apart from the references cited above *Johnstonia* Quatrefages, 1849 has been overlooked or misinterpreted.

2. Jay (1850, p. 95) proposed *Johnstonia* as a generic name for a gastropod mollusc, but this is a nomen nudum since no description, figure or reference was given.

3. Quatrefages later introduced the name, in a different taxonomic sense from that of his previous work, in a generic key to polychaetes of the family MALDANIDAE. It first appeared (Quatrefages, 1865a, p. 597; 1865b, p. 293) in the French spelling ‘Johnstonie’. The latinised name *Johnstonia* was made available in January 1866 in an English translation of the second (1865b) publication (Quatrefages, 1866a, p. 21; see also Wright, 1866, p. 720). A detailed description of *Johnstonia* [sic] was given later that year (Quatrefages, [1866b], p. 244), together with that of the type species *J. clymenoides* (p. 245); although this work is dated 1865 it was not published until

summer 1866 (see Wright, 1867, p. 578 and Claparède, 1870, p. 123). There is no reason to take '*Jonhstonia*' as anything other than a printer's error for *Johnstonia*, and the latter spelling has been used by subsequent authors. It is curious that Quatrefages (1865c, [1866b]) made no mention of his earlier (1849) use of *Johnstonia* for a nereid, though *Heteronereis* was discussed.

4. The name *Johnstonia* has also been introduced for a cestode subgenus (Fuhrmann, 1920, p. 18) and for a genus of nematodes parasitic on insects (Basir, 1956, p. 16). The first has been rejected as a junior synonym (see Fuhrmann, 1924, p. 312), but the nematode name remained in use until the submission of the present application (see Narayan Rao & Jagannath Rao, 1981 and Adamson & van Waerebeke, 1992). The subjective synonym *Oryctophila* van Waerebeke, 1973 (p. 535) has now been adopted (Adamson & van Waerebeke, 1994) as valid in place of *Johnstonia* Basir, 1956.

5. The senior homonym *Johnstonia* Quatrefages, 1849 is an unused name of doubtful meaning in the NEREIDAE (see para. 1 above), but the Commission Secretariat has been given a list of 24 works (seven of them, by eight authors, since 1955) which use *Johnstonia* Quatrefages, 1866 in the MALDANIDAE. These references include Kirkegaard (1959), Day (1967) and Fauchald (1977); for a complete bibliography see our review of the genus (Mackie & Gobin, 1993). There is no confusion as to the identity of Quatrefages's (1866) genus, the characteristic series of vascular cirri on several posterior segments being unique within the MALDANIDAE. Two specimens of *J. clymenoides* from the type locality of San Sebastian in Spain and belonging to the Quatrefages collection are in the Muséum National d'Histoire Naturelle in Paris. This material has been recorded by Grube (1870, p. 320) in his account of the annelids in the Muséum and by ourselves (Mackie & Gobin, 1993), and we (p. 231) designated specimen A'(R)-1868, No. 239b as the lectotype.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the generic name *Johnstonia* Quatrefages, 1849 for the purposes of both the Principle of Priority and the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Johnstonia* Quatrefages, 1866 (gender: feminine), type species by monotypy *Jonhstonia* [sic] *clymenoides* Quatrefages, [1866];
- (3) to place on the Official List of Specific Names in Zoology the name *clymenoides* Quatrefages, [1866], as published in the binomen *Jonhstonia* [sic] *clymenoides* (specific name of the type species of *Johnstonia* Quatrefages, 1866) and as defined by the lectotype designated by Mackie & Gobin (1993);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
 - (a) *Johnstonia* Quatrefages, 1849, as suppressed in (1) above;
 - (b) *Johnstonia* Fuhrmann, 1920 (a junior homonym of *Johnstonia* Quatrefages, 1866);
 - (c) *Johnstonia* Basir, 1956 (a junior homonym of *Johnstonia* Quatrefages, 1866).

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References

Adamson, M.L. & van Waerebeke, D. 1992. Revision of the Thelastomatoidea, Oxyurida of invertebrate hosts. 1. Thelastomatidae. *Systematic Parasitology*, 21: 21–63.

Adamson, M.L. & van Waerebeke, D. 1994 (in press). *Johnstonia* Basir (Oxyurida: Nematoda), junior homonym of *Johnstonia* Quatrefages (Polychaeta: Annelida). *Systematic Parasitology*, vol. 29.

Basir, M.A. 1956. Oxyuroid parasites of Arthropoda. A monographic study. 1. Thelastomatidae. 2. Oxyuridae. *Zoologica* (Stuttgart), 106: 1–79.

Claparède, E. 1870. Les annélides chétopodes du Golfe de Naples, seconde partie. *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève*, 20: 1–225.

Day, J.H. 1967. *A monograph on the Polychaeta of South Africa*. Part 2. Sedentaria. 420 pp. British Museum (Natural History), London.

Ehlers, E. 1864–1868. *Die Borstenwürmer (Annelida Chaetopoda) nach systematischen und anatomischen Untersuchungen dargestellt*, vol. 1. 748 pp., 24 pls. Engelmann, Leipzig.

Fauchald, K. 1977. The polychaete worms. Definitions and keys to the orders, families and genera. *Natural History Museum of Los Angeles County, Science Series*, 28: 1–188.

Fuhrmann, O. 1920. Considérations générales sur les *Davainea*. *Festschrift für Zschokke* (Basel), 27: 1–19.

Fuhrmann, O. 1924. Questions de nomenclature concernant le genre *Rallietina* Fuhrmann (Syn. *Davainea* Bl.). *Annales de Parasitologie Humaine et Comparée*, 2: 312–313.

Grube, A.E. 1870. Bemerkungen über Anneliden des Pariser Museums. *Archiv für Naturgeschichte*, 36: 281–352.

Jay, J.C. 1850. *A catalogue of the shells ... in the collection of John C. Jay, M.D.* (Fourth Edition). Craighead, New York.

Kirkegaard, J.B. 1959. The Polychaeta of West Africa. Part I. Sedentary species. *Atlantide Report*, 5: 7–117.

McIntosh, W.C. 1910. *A monograph of the British annelids*, vol. 2, part 2. Syllidae to Ariciidae. Ray Society, London.

Mackie, A.S.Y. & Gobin, J. 1993. A review of the genus *Johnstonia* Quatrefages, 1866 (Polychaeta, Maldanidae), with a description of a new species from Trinidad, West Indies. *Zoologica Scripta*, 22: 229–241.

Marschall, A.F. von. 1873. *Nomenclator zoologicus continens nomina systematica generum animalium tam viventium quam fossilium, secundem ordinem alphabeticum disposita*. iv, 482 pp. Salzer, Vindobonae.

Narayan Rao, P. & Jagannath Rao, V. 1981. Description of two new species belonging to the genus *Johnstonia* Basir, 1956 with a key to all the species of the genus. *Proceedings of the Indian Academy of Parasitology*, 2: 89–95.

Quatrefages, A. de. 1849. Études sur les types inférieurs de l'embranchement des annélés. Mémoire sur la famille des Chlorèmiens, *Chloraecea*, nob. *Annales des Sciences Naturelles (Zoologie)*, (3)12: 277–306.

Quatrefages, A. de. 1850a. Mémoire sur le système nerveux des annélides (Extrait). *Annales des Sciences Naturelles (Zoologie)*, (3)13: 41–46.

Quatrefages, A. de. 1850b. Études sur les types inférieurs de l'embranchement des annélés. Mémoire sur le système nerveux des annélides proprement dites. *Annales des Sciences Naturelles (Zoologie)*, (3)14: 329–398.

Quatrefages, A. de. 1865a. Note sur la classification des annélides. *Compte Rendu Hebdomadaire des Séances de l'Académie des Sciences* (Paris), 60: 586–600.

Quatrefages, A. de. 1865b. Note sur la classification des annélides, et réponse aux observations de M. Claparède. *Annales des Sciences Naturelles (Zoologie)*, (5)3: 253–296.

Quatrefages, A. de. 1865c. *Histoire naturelle des annélés marins et d'eau douce. Annélides et géphyriens*. Tome 1. 588 pp. Roret, Paris.

Quatrefages, A. de. 1866a. On the classification of the annelides. *Annals and Magazine of Natural History*, (3)17: 1-24. [Translation of 1865b].

Quatrefages, A. de. [1866b]. *Histoire naturelle des annélés marins et d'eau douce. Annélides et géphyriens*. Tome 2. 794 pp. Roret, Paris.

van Waerebeke, D. 1973. Quatre nouvelles espèces d'Oxyurides associées aux Oryctes à Madagascar. *Bulletin du Muséum National d'Histoire Naturelle*, (3e série, no. 123), Zoologie, 95: 535-553.

Wright, E.P. 1866. Annelida. *Zoological Record*, 2: 711-739.

Wright, E.P. 1867. Annelida. *Zoological Record*, 3: 578-600.